

Receipt date: 08/04/2006

1AP7 Rec'd PCT/PTO 04-AUG-2006  
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Approved for use through 3/31/2007. OMB 0633-0021 793

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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		<b>ATTORNEY'S DOCKET NUMBER 06334/HG</b>
<b>INTERNATIONAL APPLICATION NO. PCT/JP2004/017824</b>		<b>U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/579,943</b>
<b>INTERNATIONAL FILING DATE 24 NOVEMBER 2004</b>		<b>PRIORITY DATE CLAIMED 27 NOV. 2003; 11 NOV. 2004</b>
<b>TITLE OF INVENTION METHOD AND APPARATUS FOR DETECTING CRATER END OF CONTINUOUSLY CAST PRODUCT, AND METHOD FOR PRODUCING CONTINUOUSLY CAST PRODUCT</b>		
<b>APPLICANT(S) FOR DO/EO/US Yukinori IIZUKA; Jun KUBOTA; and Koichi TSUTSUMI</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))</p> <p>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</p> <p>b. <input type="checkbox"/> has been communicated by the International Bureau.</p> <p>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <p>a. <input type="checkbox"/> is attached hereto.</p> <p>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</p> <p>b. <input type="checkbox"/> have been communicated by the International Bureau.</p> <p>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p>d. <input type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <p>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input type="checkbox"/> A preliminary amendment.</p> <p>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the International application under 35 U.S.C. 154(d)(4).</p> <p>20. <input type="checkbox"/> Other items or information:</p>		

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Date of Deposit: August 4, 2006

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above with sufficient postage, and is addressed to the Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450

  
Lori Valdes

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KPK/

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10579943 - GAU: 1793

PTO-1390 (Rev. 02-2005)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
10/579,943		PCT/JP2004/017824		06334/HG	
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21. <input type="checkbox"/> Basic national fee..... \$300				\$	300.00
22. <input type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 All other situations..... \$200				\$	200.00
23. <input type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the International application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared and provided to the Office..... \$400 All other situations..... \$500				\$	400.00
TOTAL OF 21, 22 and 23 =				\$	.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	.00
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$	.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	- 20 =		x \$ 50	\$	.00
Independent claims	- 3 =		x \$200	\$	.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	.00
TOTAL OF ABOVE CALCULATIONS =				\$	.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					
SUBTOTAL =				\$	.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	.00
TOTAL NATIONAL FEE =				\$	.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	.00
TOTAL FEES ENCLOSED =				\$	.00
				Amount to be refunded:	\$ .00
				Amount to be charged:	\$ .00
<p>a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>06-1378</u>. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p>					
<p>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</p> <p>SEND ALL CORRESPONDENCE TO:</p> <p><b>CUSTOMER NO. 01933</b>  <b>HERBERT GOODMAN</b>  <b>Frishauf, Holtz, Goodman &amp; Chick P.C.</b>  <b>220 5TH AVE FL 16</b>  <b>NEW YORK NY 10001-7708</b></p>					
				SIGNATURE	
				Herbert Goodman	
				NAME	
				17.081	
				REGISTRATION NUMBER	

FORM PTO-1390 (REV. 02-2005)

Page 2 of 2


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**IN THE UNITED STATES PATENT  
AND TRADEMARK OFFICE**

Appl. No. : 10/579,943  
Applicant : Yukinori IIZUKA et al  
Filed : May 22, 2006  
For : METHOD AND APPARATUS FOR  
DETECTING CRATER END OF  
CONTINUOUSLY CASE PRODUCT...  
Docket No. : 06334/HG  
Customer No.: 01933

Express Mail Mailing Label  
No.: EV 902 108 044 US  
Date of Deposit: August 4, 2006

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Lori Valdes

In the event that this Paper is late filed, and the necessary petition for extension of time is not filed concurrently herewith, please consider this as a Petition for the requisite extension of time, and to the extent not tendered by credit card payment, authorization to charge the extension fee, or any other fee required in connection with this Paper to Account No. 06-1378.

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


S I R :

A copy of each of the publications identified in the enclosed Form PTO/SB/08A is enclosed herewith. The first three identified publications are also identified in the enclosed English language International Search Report in the International Application PCT/JP2004/017824. The remaining six publications are identified in the present specification (see pages 2-5).

It is requested that said publications be considered and that a copy of the enclosed Form PTO/SB/08A with the Examiner's initials in the left column be returned to the undersigned attorney.

Frishauf, Holtz, Goodman  
& Chick, P.C.  
220 Fifth Ave., 16th floor  
New York, NY 10001-7708  
Telephone: (212) 319-4900  
Facsimile: (212) 319-5101  
HG/lpv

Respectfully submitted,

  
HERBERT GOODMAN  
Reg. No. 17,081

Encs.: Form PTO/SB/08A and publications identified thereon;  
International Search Report

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10579943 - GAU: 1793

PTO/SB/08A (08-00)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for Form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number		10/579,943	
				Filing Date		May 22, 2006	
				First Named Inventor		Yukinori IIZUKA et al	
				Group Art Unit			
				Examiner Name			
Sheet	1	of	1	Attorney Docket Number		06334/HG	

## U.S. PATENT DOCUMENTS

Exam. Inits*	Cite No <sup>1</sup>	Document Number	Kind Code <sup>2</sup>	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion

## FOREIGN PATENT DOCUMENTS

Exam Inits <sup>1</sup>	Cite No <sup>1</sup>	offc <sup>3</sup>	Document Number <sup>4</sup>	Kind Code <sup>5</sup>	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T <sup>6</sup>
/KPK/ 	1	JP	62-148850	A	KAWASAKI STEEL	07-02-1987		*1
	2	JP	63-313643	A	KAWASAKI STEEL	12-21-1988		*1
	3	JP	01-127161	A	KAWASAKI STEEL	05-19-1989		*1
	4	JP	55-158506	A	KAWASAKI STEEL	12-10-1980		*1
	5	JP	05-123842	A	KOBE STEEL LTD	05-21-1993		*2
	6	JP	57-032863	A	NIPPON STEEL CORP	02-22-1982		*1
/KPK/	7	JP	02-055909	A	NIPPON STEEL CORP	02-26-1990		*1
	8	JP	<del>63-313643</del>	<del>A</del>	<del>KAWASAKI STEEL</del>	<del>12-21-1988</del>	duplicate	<del>*1</del>
/KPK/	9	JP	2002-014083	A	NKK CORP	01-18-2002		*1
			*1English language Abstract only					
			*2English language Abstract and machine translation					
Examiner Signature		/Kevin Kerns/			Date Considered	05/29/2009		

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPBP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Place a check here if English translation is attached.

DATE MAILED: AUGUST 4, 2006

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